

Asselian to Murgabian carbonates and siliciclastics were deposited. The basement of the shelf was built up by an older orogenic belt (Dev.-Carb.), extending further to the east. The shelf led westwards into a pelagic basin. Further to the west, again platform carbonates are present.

The carbonate sedimentation on the western platform was rarely interrupted by siliciclastic influx through Asselian to Midian times. Asselian and Sakmarian keratophytic to quartzkeratophytic tuffs and tuffites are interbedded with these sediments. Subsequently spilitic sills intruded these strata. In the pelagic Petchabun basin, deposition of ribbon cherts continued from Asselian to Kubergandian. In Lower Permian, allodapic limestones and tuffites were transported from the neighbouring platforms into the basin.

The Middle Permian flysch sedimentation resulted from a strong orogenic activity.

The basin was E-vergent, isoclinally folded and overthrust.

In its eastern parts Kubergandian to Midian molasse was deposited. The intensity of folding of the molasse decreases towards the east or the younger strata.

The total width of the basin was probably not greater than 200 km. The pelagic sediments, flysch and molasse represent a thick pile of a coarsening-upwards sequence, typical of subduction related sutures. Folding affected a marginal marine basin and was caused by a westward directed subduction (A-subduction) under the volcanic arc.

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#### **SEDIMENTATION AND VOLCANISM DURING THE PERMIAN IN THE PETCHABUN BASIN, THAILAND**

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The Permian evolution of the Petchabun basin in Thailand reflects the late Variscan orogeny in SE-Asia.

During the Permian, a N-S trending trough was flanked on its eastern side by a shelf, on which As-